THE BOOK OF ANNUALS

HENRY H. SAYLOR

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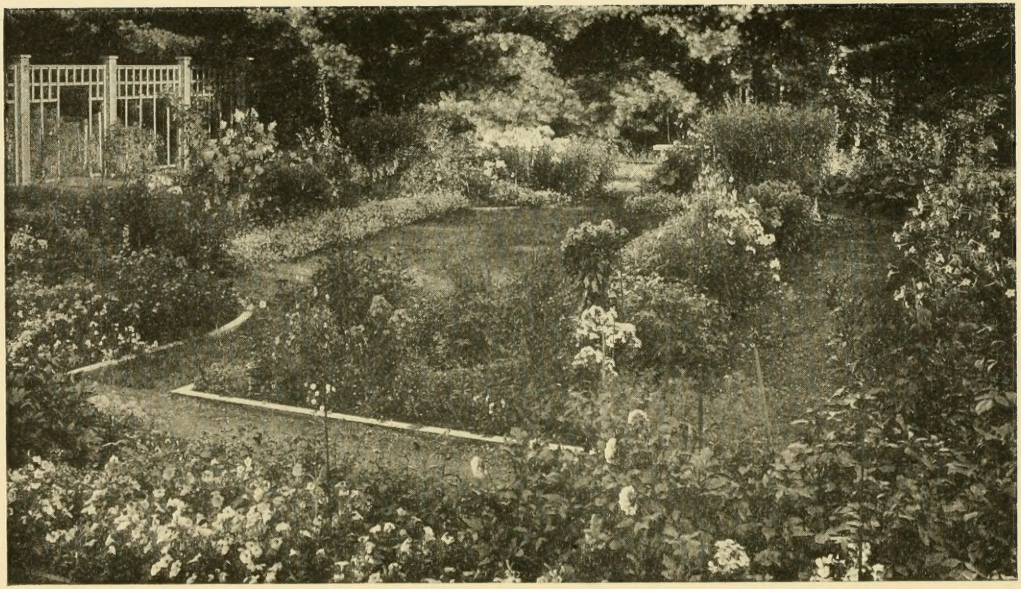
The Book of Annuals



The garden of annuals will perhaps always remain the garden of the million, for the planting fever will never fail to appear in its most malignant form each spring

The Book of Annuals

A PICTORIAL GUIDE TO THE CHOICE AND CULTURE OF FIFTY OF THE MOST DEPENDABLE PLANTS THAT FLOWER THE FIRST YEAR FROM SEED

By
Henry H. Saylor
Author of
Making a Rose Garden, etc.

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The Book of Annuals

INTRODUCTION

THE field of garden literature surely has not suffered in recent years from any lack of new books. Volumes in plenty have made their appearance, laying bare the secrets of the bulb garden, the hardy border, the successful management of hotbeds—and few of them have fallen short of a very acceptable standard. Indeed, the time seems fast drawing near when we in this country shall overtake our astute English cousins in the degree of specialization their gardening writings have attained. Sometimes I feel that we are going too fast, that we are passing fourth readers around a class that would prefer a primer, for, after all, there are uncounted thousands among us who have yet to taste the real joys of gardening.

Quite recently a friend asked whether I would help him with his choice of annual flowering plants for his proposed garden. He had before him a sheaf of the seedsmen's catalogues, from the bewildering pages of which he was attempting to make a list of seeds that he might order. The names, I found, meant little to him beyond the mere sounds. "Love-in-a-mist" had a definite appeal, but whether it was one of the old standbys or one of the difficult plants that the experienced gardeners have given up trying

to grow, he had no means of knowing. Its color—white or pale blue flowers—was listed, also its height, but whether it was one of the timid plants that need careful guarding from more vigorous neighbors, or a weed-like ruffian, seeking but a chance to oust all else from the vicinity, was as a closed book—and the definitely successful and well rounded garden a far-off goal.

"I suppose I should be able to find all these things in the books," said my friend, "but somehow it seems rather hard to dig out. The gardening writers tell me how to treat hollyhocks for the rust and that bulbs should be planted upon a cushion of sand, but I haven't yet found one book that will give me a start by helping me to pick out a dozen or fifteen flowering plants that will grow in spite of my ignorance of their needs, and give me a variety of attractive bloom throughout the summer months."

All of which is my reason for presuming to add this humble little volume to the long list that can scarcely be denied a space on the amateur gardener's bookshelf.

The arrangement, it is hoped, has been kept as simple as the aim of the book: fifty plants that flower the first year from seed sown in the spring are pictured in the following pages. Opposite each is given in condensed form the desired data regarding color, height, character of growth, soil preference and general culture, from which a garden of annuals may be chosen and brought into bloom. The list has been

made up with the idea of including the majority of the available plants, including a few vines. An asterisk marks about half of these as the most dependable plants that will give a satisfactory variety of form and color.

In choosing a list for the available garden space, the most successful results will be secured by spending some little time and study upon the planting arrangement *on paper*. It is so much easier to change locations and proportions on a sketch pad than to correct errors after the plants are once started upon their life work. Lay out the garden plot on paper first, representing each foot of length and breadth by a half-inch or other convenient unit. In a plot along a fence or wall, keep the higher plants at the rear and the low edging plants in front. Avoid straight lines in the clumps, allowing the various plantings to run in and partly around neighboring groups rather than as simple bands or blocks. Above all, have one or two generous groups of a particular plant rather than a lot of insignificant patches. With most annuals, it takes a fairly large planting to make a satisfactory showing, and it would be far better to cut down the list of plants to be grown than to attempt to grow more kinds of flowers than the available space warrants.

There are four considerations that should be kept in mind while arranging the planting plan: color of flowers, height when in bloom, time of bloom, and preference as to sunlight or shade. The available

garden space will probably be either wholly in a sunny location or in a partly shaded one; the wholly shaded plot offers difficulties that, with annuals, are perhaps too great to surmount. This narrows our governing factors to three, then, and it will require considerable study and readjustment to work out a plan for the bed that will pass all tests.

The requirements as to height have already been touched upon. If the bed is to be viewed from both sides, the taller plants will, of course, be put in the center, graduating the others down to either edge. A mechanical and too regular effect as to height need not be feared, for it would be impossible to obtain, even if we were to strive for it.

The colors and times of bloom are more difficult to arrange. All that we need to make sure of, however, is that there will be a fair balance of bloom in the bed or throughout the garden during each month, and that unpleasant combinations of color do not occur. The use of white flowers between reds and blues, or between reds and yellows, or between two shades of the same general color, may always be depended upon to preserve the peace when there is any question about harmony. There is likely to be more need of the white between colors near together in the spectrum than between colors that are nearly complementary. A clump of clear blue is made more beautiful by contrast with neighboring yellow than if the two were separated. If you have a vista between the beds—along a straight walk, for example

—the grouping of the blues at the far end, with the reds and yellows near the viewpoint, will give greater depth of perspective; the opposite arrangement will make the end of the vista appear quite close at hand.

It will be well to remember that the amount spent for seeds alone is a small part of the total of preliminary labor, soil enrichment and preparation, and the care of the garden throughout the summer. For this reason, do not hesitate to pay the few extra cents per packet that clean, healthy seeds must necessarily cost. While some gardeners prefer to enjoy the surprises that a packet of mixed colors will bring, those who have any definite ideals of color arrangement will pin their faith to the slightly more expensive seeds that will give bloom of a single known color.

SOWING, TRANSPLANTING AND CULTURE

HAVING decided what flowers are to be grown, there arises the great question of when to plant. In spite of the many attempts that are made every year to put the planting season on a definite schedule of dates, this will never be possible. There are too many variable factors to be taken into consideration—latitude, altitude, character of the season, condition of the soil and so on. In the following pages planting dates have been given, usually, but it should be understood that these are intended only as a rough guide. The amateur will do well to consider that there are, in the big class of annuals, three distinct subdivisions—hardy annuals, half-hardy annuals and tender annuals. The first of these may be sown outdoors as soon as the ground becomes mellow and readily workable. This, roughly, is the first part of April, in the vicinity of New York—the latitude for which the dates in this book are given. North and south of this latitude the planting date varies approximately a week with each hundred miles—earlier in the South, naturally. The half-hardy annuals are treated in one of two ways: started in a coldframe in April, to be transplanted into the open border in May, after

all danger of frost is passed; or they may be treated as the tender annuals and sown in the open only after danger of frost. The tender annuals are those which will perish at a touch of frost, so they must be sown only after that danger is past.

Of course it is impossible to tell just when this date will be in any location. June first is certainly safe, in the vicinity of New York, but by that time the gardener has lost perhaps two or three weeks of valuable time. The risk of loss in most cases is small —the cost of a few packets of seed—so that it is usually customary to sow the seed early in May and accept the risk of its having to be planted again. May fifteenth is usually considered a perfectly safe date. This is about corn planting time, a period which the Government itself has worked out on a map showing the date over the whole country. The May first belt extends from the middle of the Jersey coast out through the lower part of Pennsylvania, the central part of Ohio, Indiana and Illinois, along the lower edge of Iowa and through the lower and central part of Nebraska. On April fifteenth corn may be planted through the lower part of Virginia, central Kentucky, central Missouri and central Kansas. The April first season extends over the central part of North Carolina, through Tennessee, diagonally through the lower edge of Missouri, the upper corner of Oklahoma, into the lower left-hand corner of Kansas. March fifteenth is safe enough for southern North Carolina, the central part of South Carolina,

Georgia, Alabama, Mississippi, Arkansas and Oklahoma. On the other hand, May fifteenth is none too late for southern New Hampshire and Vermont, northern New York, the Great Lakes country, northern Wisconsin and Minnesota, and central North Dakota.

On account of this uncertainty as regards a safe date for planting the tender annuals outdoors, many of the annuals are started indoors in what are called "flats," to be transplanted into the open after danger of frost is past. It should be understood that in many cases little is gained in this way. The plants grow much more slowly indoors than they would outdoors in June, so that very frequently those who start the ordinary annuals in flats in April find that by planting seeds of the same annuals in the open in late May the latter soon catch up to the former plants and usually prove more sturdy. However, it is a decided advantage to plant certain of the annuals indoors, as they are slow in starting and the best of their bloom can be realized only by having the seedlings well under way when they are set out in May. Such annuals are nicotiana, snapdragon, everlastings, cosmos (particularly the late-flowering kinds), salpiglossis and moonflower.

A hotbed is naturally the best of all places in which to start annuals such as those just named, and any others that may need an early start. The construction of a hotbed has been explained in so many other books that it may well be omitted here.

For the greater number of amateur gardeners, however, the hotbed will perhaps seem to be too much bother, and they will prefer to start the seeds in flats indoors. Late February or March is the earliest date when this need be done, in the vicinity of New York. Around Chicago, April first is time enough. The early date is for the slow-starting annuals. March fifteenth or April first is really soon enough to start the majority of them. This will give fair-sized plants to set out by the middle of May. It will readily be seen that it does not pay to have the seedlings reach this stage before that time. Not only is nothing gained, but everything is liable to be lost unless the seedlings are transplanted from the flats into larger flats, pots or paper pots.

The flats are usually made by sawing ordinary cracker boxes into sections three or four inches deep and covering one side with boards, through which half a dozen holes are bored for drainage. Do not make the mistake of having these flats too large. They are heavy and awkward to handle when filled with wet soil.

The soil for the flats may well be of the best for its purpose. Otherwise all our trouble and nursing will go for naught. Perhaps the easiest way to get this soil would be to patronize the nearest florist. A proper mixture can be made without great trouble, however, by taking equal parts of good garden soil, leaf mold, thoroughly rotted black manure, and sand. The garden soil is best if scraped from the bottom of

thick sod. The leaf mold may be scraped from some hollow in the woods where leaves have collected for years. The manure must be old, black and so thoroughly rotted that it is like fine black soil. Turn this mixture over and over on a platform or in a large box, with a spade, to make it uniform throughout. Then put into the bottom of the flats a bottom layer of cinders, gravel, coal ashes or even excelsior—anything that will secure drainage for the under part of the soil. On this put the prepared soil to the depth of two or three inches, sifting the top half-inch or inch on through a fine sieve—a piece of screen wire mesh stretched over the bottom of a box will serve nicely. See that the box is tapped to settle the soil and then make the top surface even.

At this point it will be well to pour boiling water over the flats of soil. This will kill any insect or plant life that might trouble us later. On the next day the soil will probably be in good condition for planting. Smooth the top and mark out with the edge of a board the necessary tiny drills or trenches in which the seed is to go. These need not be over two inches apart but should run the whole length or width of the flat. If but one or two kinds of seed are used in the flat, it may be more convenient to broadcast it rather than sowing in drills, although it seems to be easier when transplanting to take the little seedlings from a drill.

It is a general principle that seeds sown indoors in flats should be covered by a depth of soil equal to

once or twice their diameter. Without attempting the microscopic task of measuring the diameter of the small seeds, it will be found satisfactory to put these on top of the soil, pressing them into it with a flat board and then sifting a very little soil over them.

Some seeds need soaking over night in warm water in order to hasten germination. Some, like moon-flower, are extremely slow in germinating, unless the heavy shell of the seed is nicked with a file. Some, like nicotiana, need even more elaborate preparation.

After the seeds are sown, the flat should be given a thorough watering. The sprinkling of water over the top from a watering-pot would be fatal, washing the seeds out of their places and playing general havoc with the careful work that has been done. However, a covering of burlap or bagging over the flat will break the force of the stream and secure a fairly even saturation. By far the best way, however, is to stand the whole flat in the bottom of a wash-tub or other receptacle, so that it may soak up water from the bottom. Allow it to stand in the water until the top appears moist. Then allow it to go unwatered until the top seems fairly dry. Too frequent watering tends to keep the soil wet rather than in the moist condition that is best for germination of the seeds and early growth.

Covering the flats with glass for a day or so in the sun will hasten the germination of the seeds if they have been started late. Otherwise it is just as well to let them come along as they will.

One great difficulty in raising the seedlings in flats is that they are liable to become spindling, the result of forcing in a warm and not entirely congenial atmosphere. It would be well to keep the flats in a room that does not get too much artificial heat. Flats of very sturdy little seedlings have been raised behind a window in a cool attic, where they have gotten the benefit of the sun and none of the harm that comes from superheated rooms. The coldframe naturally is a better place still, and it is in such a place that seedlings will attain the sturdiest growth.

If the seedlings show their second true leaves before the weather has become settled enough to transplant them to their permanent quarters, they should be taken out of the flats and put into pots, old berry-boxes or paper pots. In transplanting the seedlings, either to flats, pots or outdoors, lift a portion of a row with a trowel, taking the soil to the full depth of the box and then break off small pieces containing individual plants. With what is known as a "dibber" or "dibble"—a short length of broomstick pointed at one end—a hole is made in the new location. Taking the little plant by the stem, it is lowered into this hole until all the roots and half its stem are under the surface. The dibble is then put in again an inch away from the hole and moved towards the plant so as to close up the opening in which it is held.

After transplanting the seedlings, whether to an indoor location or outside, keep the plants from the sun for two or three days.

It is said that annuals will grow in practically any soil. If this is true it is no reason why we should attempt to grow them that way. The results are sure to be disappointing. The border or bed in which the annuals are to grow should be spaded over to the depth of a foot—one full "spit" (the depth of a spade blade) and another short one below it. After the soil has been thoroughly broken up it should have mixed with it a quantity of old well-rotted manure. Fresh, "green" manure is far worse than useless; it is completely destructive to plant life. If the soil shows a tendency to stickiness, it is over-balanced on the clay side and needs, in addition to the manure, some sand. The best soil for annuals should be such that when a handful is taken from beneath the surface and squeezed, it will, when released, partly crumble apart. Clayey soil remains in a sticky ball; soil that is too sandy falls entirely apart too quickly.

The seeds should be sown outdoors somewhat deeper than in flats—three to four diameters under the surface—and it is always well to sift over the soil, after the seed is planted, a light covering of sand or sandy soil, which will help to prevent the ground from baking and forming a crust.

Watering is a simple enough procedure, yet it is probably one of the most common sources of trouble in the garden of annuals. A light sprinkling daily does more harm than good. The ground should be thoroughly soaked, say once a week. If water is conveyed to it by means of a hose, take off the nozzle and

leave the hose on the ground to flood the border or bed with as much as it will readily absorb. If this is done at night, give the surface of the soil a mulch in the morning by breaking up the top crust as finely as possible. This "dust" mulch should be created after every rain and after every watering. It is in this way only that the moisture that is put into the ground can be retained there for the use of the plants. As soon as the surface of the soil is allowed to form a crust the water is drawn out by evaporation through capillary attraction and lost to the garden.

The necessity for weeding a garden has become so firmly implanted in the Anglo-Saxon mind that it seems hardly necessary to dwell upon it here. It is just as essential to keep weeds out of the flower garden as out of the vegetable garden, and the task is undoubtedly harder in the former case because of the more complicated grouping and the absence of rows. The only plan of action that will lead to the ideal garden is to keep the weeds out from the earliest stages of growth. If they are kept down at the first, when the annuals themselves are developing their strength, they will be far easier to keep down later when the flowers are better able to hold their own.

There are few garden pests that will cause annoyance in the garden of annuals. First of all, there are the aphids, the most common of the great class of sucking insects. They are tiny green things that may be seen clustered around a soft stem, sucking the juice from it. If they seem to be very thick on the

plants they may be put out of the fight by a spraying of hot soapsuds—use half a cake of Ivory or common laundry soap churned up until dissolved in eight gallons of hot water.

Then there are various insects of the eating class—the beetles, etc. These are perhaps most easily disposed of by knocking them off the plants into a can of kerosene. If they appear in such large numbers that this method seems impractical, sprinkle powdered hellebore on the foliage in the early morning when the dew is on the plants, or after a shower. A powder gun will do this work much more effectively than it can be done by merely shaking the powder over the plants, as with a gun it may be gotten on the under side of the leaves where the insects are most likely to be found.

AFRICAN DAISY

Arctotis grandis

A plant that should be given plenty of room on account of its rather sprawling manner of growth. Stake, if grown near smaller plants.

Sow seeds outdoors April fifteenth, or start them in flats indoors April first and transplant to the border in May.

COLOR: white petals, lilac on the under side; center dull blue with yellow outside circle.

HEIGHT: two and a half feet, branching.

PERIOD OF BLOOM: July through early frosts.

LOCATION: rich loam; sun.

* AGERATUM (FLOSS FLOWER)

Ageratum conyzoides

One of the best annuals for edging the beds.

Sow seeds indoors about March fifteenth, transplanting after May twenty-fifth; or sow seeds outdoors after danger of frost. A sowing in September will give plants that may be potted and brought into bloom indoors.

COLOR: blue or white, or varying to rose.

HEIGHT: one foot, rather loose growth, except in some dwarf and compact forms.

PERIOD OF BLOOM: July 15 to frost.

LOCATION: any garden soil; any exposure.

* ASTER, CHINA

Callistephus hortensis

One of the most popular and highly developed annuals. It is easily and safely transplanted, so that it is an excellent plant for a reserve bed from which to fill gaps.

The orange rust, appearing on the under side of the leaves, occasionally attacks the plants; spray with ammoniacal copper carbonate solution. (Make a thick paste of 3 oz. copper carbonate with water in a wooden vessel; add to this 5 pints strong ammonia—26° Baumé—diluted with 3 or 4 parts water; stir and add water to make 50 gals.) If attacked by black beetles (about Aug. 1) knock these into a pan of kerosene. Dig wood ashes in to keep aphis from the root. Mulch in dry weather with grass clippings to protect the shallow roots.

Seeds may be sown under glass by Feb. 15 and the plants set out by May 1. The plants will withstand some frost.

COLOR: various.

HEIGHT: two feet.

PERIOD OF BLOOM: August to October; late asters, September to October.

LOCATION: light rich soil; sun.

BALSAM

Impatiens Balsamina

A widely cultivated half succulent annual of erect, compactly branching nature. The flowers appear clustered along the stem in the leaf axils.

Start seeds indoors April first or sow in the open when danger of frost is past. Transplanting and pinching-in induce stronger and more compact growth. Do not let the plants suffer for lack of moisture.

The double balsams are called Camellia-flowered varieties.

COLOR: white to dark red; yellowish and spotted.
HEIGHT: one to two and a half feet.
PERIOD OF BLOOM: July to frost.
LOCATION: rich sandy loam; sun.

* CALLIOPSIS

Coreopsis tinctoria

Known also as tickseed—one of the most easily grown garden annuals. There are Tom Thumb varieties. The flowers are good for cutting, and cutting induces more bloom.

Sow seed where the plants are to bloom, thinning seedlings to eight or ten inches apart.

COLOR: yellow.
HEIGHT: one to three feet.
PERIOD OF BLOOM: mid-June to September.
LOCATION: any garden soil; sun.

* CANDYTUFT

Iberis Amara and *umbellata*

Next to sweet alyssum, perhaps the most widely used annual for edging. It is shown in the illustration with centaurea in the background.

Sow seeds as early as possible in the spring, or in the fall. Thin to four inches apart. For continuous bloom sow every two weeks.

I. Amara is the common white-flowered candytuft; the kinds with colored flowers are varieties of *I. umbellata.*

COLOR: white (*I. Amara*); purplish (*I. umbellata*).

HEIGHT: six to eighteen inches.

PERIOD OF BLOOM: July to September. (Fall-sown seed, May to July.)

LOCATION: rich garden soil; open sun.

* CASTOR BEAN

Ricinus communis

A foliage plant of tropical appearance, too frequently seen as a central motif in a small circular bed, but which may be useful as a background for the border.

Plant seeds indoors in pots for transplanting, or outdoors in May.

The varieties are obtainable in various colors of fruits, stems and leaves.

COLOR: of leaves, green, reddish, very dark and variegated.

HEIGHT: three to fifteen feet.

LOCATION: Deep rich soil; sun.

CATCHFLY

Silene Armeria and *pendula*

Known also as sweet-william, but not to be confused with the perennial to which that name is more frequently applied. The flowers are borne in flat-topped panicles.

Seeds may be sown in the autumn or successively from early spring. Start April first and sow fortnightly until July.

COLOR: White through pink to purple.

HEIGHT: *S. Armeria,* one to one and a half feet; *S. pendula,* trailing.

PERIOD OF BLOOM: July to October.

LOCATION: sandy loam; full sun.

CHRYSANTHEMUM (SUMMER)

Chrysanthemum carinatum

The commonest of the few annual members of the splendid chrysanthemum family. There is also a strain known as *C. Burridgeanum* showing a ring of red on the rays, adding a fourth color to this remarkably brilliant, though to some tastes rather gaudy, flower.

Start seeds indoors in April, or outdoors after danger of frost is past.

COLOR: white rays with a yellow ring at base and dark purple disc.

HEIGHT: two feet, bushy.

PERIOD OF BLOOM: midsummer to frost.

LOCATION: rich sandy loam; sun.

CLARKIA

Clarkia elegans

An easily grown annual that has been much improved in recent years. The showy, attractive flowers are good for cutting as well as for massing in the front part of the border.

Start seeds indoors in February or March or outdoors April first.

COLOR: purple or rose, also white varieties.
HEIGHT: one to three feet.
PERIOD OF BLOOM: mid-June to September.
LOCATION: warm light soil; sun or partial shade.

* COBŒA

Cobœa scandens

One of the most rapid of the annual climbers. Particularly valuable for its strong foliage growth and effective flowers in covering trellises, arbors, tree trunks and rough walls.

Sow seeds indoors in March or by April first, putting them in edgewise and covering but lightly with soil. Or, sow outdoors in the same way, in May.

COLOR: white and purple.
HEIGHT: twenty-five to fifty feet on good support.
PERIOD OF BLOOM: July.
LOCATION: deep loam; sun.

COCKSCOMB

Celosia cristata

A very stiff, formal little plant that was known in most of the old-time gardens. Its well-marked colors of foliage are sometimes useful as a foil to neighboring bloom.

Sow seeds indoors in early spring and set out plants in May.

It is moisture-loving and may need forceful syringing with clear cold water, or dusting with flowers of sulphur to get rid of the red spider.

COLOR: (of combs) red, purple, violet, crimson and yellow.

HEIGHT: nine inches.

PERIOD OF BLOOM: June to October.

LOCATION: light rich soil; sun or partial shade.

CORNFLOWER

Centaurea cyanus

Known also as bachelor's button, bluet, ragged sailor and sometimes as bluebottle. A deservedly popular annual, flourishing in practically any location where it receives the benefit of a little sun, and blooming continuously from July to frost, if flower heads are kept picked. It self-sows.

Sow seed outdoors in May, where plants are desired, or start indoors April first for earlier bloom.

COLOR: blue, purple or white.
HEIGHT: one to two feet.
PERIOD OF BLOOM: July to frost.
LOCATION: any garden soil; sun or partial shade.

COSMOS

Cosmos bipinnatus

One of the favorite tall annuals for late summer bloom. Its worst fault is its lateness of bloom—too frequently nipped in its youth by the early frosts. A dwarf form, four to five feet high, blooms in July.

Sow seed indoors in April and transplant outdoors after danger of frost is past. Pinch back the leading shoots to induce more bushy growth.

COLOR: white through pinks to red.

HEIGHT: three to ten feet, needing support of wire mesh or strings.

PERIOD OF BLOOM: dwarf forms, July to frost; tall forms, September to frost.

LOCATION: sandy soil, not too rich; sun.

DATURA (TRUMPET FLOWER)

Datura cornucopia

A fragrant-flowered annual of rather striking beauty. The flowers are large—eight inches long—and suggest their botanical variety name in their succession of one trumpet-shaped form inside of another.

Start seeds indoors April first, setting out plants May first.

COLOR: white, yellow and purple.
HEIGHT: two to three feet.
PERIOD OF BLOOM: July to September.
LOCATION: rich, moist soil; warm sun.

EVERLASTING (STRAW FLOWER)

Helichrysum bracteatum

The curious dry vari-colored flowers that seem artificial by reason of their "everlasting" qualities. They are easily grown. It would be wise to establish their location so as to prevent their varied and brilliant colors from clashing with more delicate bloom.

Sow seed outdoors in April or before, thinning seedlings to twelve inches apart.

Gather flowers at night to preserve their best form.

COLOR: white, yellow, red, etc.
HEIGHT: one and a half to three feet.
PERIOD OF BLOOM: July to frost.
LOCATION: Any garden soil; sun.

GAILLARDIA (BLANKET FLOWER)

Gaillardia pulchella

An exceedingly brilliant flower—too much so in the estimation of some—but if one is careful to select named varieties of the proper colors the results are very gratifying.

Sow seeds outdoors where plants are to bloom and sow early in April or before, as the seed germinates slowly.

COLOR: various, chiefly yellows, reds, garnets, etc.
HEIGHT: one to two feet.
PERIOD OF BLOOM: late June to frost.
LOCATION: any good soil; sun.

GLOBE AMARANTH

Gomphrena globosa

Sometimes called bachelor's button. The globe-like flowers, about the size of clover heads, are of many colors and are remarkable for the showy bracts which hide the true flowers. They are "everlastings," and like most such are easily grown.

COLOR: various.
HEIGHT: twelve to eighteen inches.
PERIOD OF BLOOM: July.
LOCATION: any good garden soil; sun.

GODETIA

Godetia amœna

One of the old-time garden favorites, with flowers of great brilliance and a satiny luster that has given them the name "satin flower."

COLOR: white, rose, light purple.
HEIGHT: one foot.
PERIOD OF BLOOM: July to frost.
LOCATION: any garden soil that is not too moist; sun.

GOURDS

Cucurbita ovifera, etc.

One of the most decorative of the annual vines, bearing picturesque fruits of a variety of form and size. There are such named varieties as Hercules' Club (illustrated), Egg-shaped, Dipper, Bottle-shaped, Dish-rag, Pear-shaped and so on.

Sow where vines are desired, after danger of frost is past.

HEIGHT: ten to fifteen feet, needing support.
LOCATION: any good garden soil; sun.

GYPSOPHILA (Annual)

Gypsophila elegans

Bearing a profusion of very small flowers that give a mist-like ensemble with the delicate foliage. The latter is useful for combining with other cut flowers.

Sow seed outdoors every two weeks from April first to July, where plants are desired.

Gypsophila paniculata, Baby's Breath, is the perennial form.

COLOR: white and rose.
HEIGHT: one foot.
PERIOD OF BLOOM: June to frost.
LOCATION: open, rather dry; sun.

JAPANESE HOP

Humulus Japonica

One of the most reliable annual climbers, being free from attack of insect pests and attaining a height of some twenty feet. The foliage is luxuriant and attractive, there being varieties with leaves variegated with white and gray splotches.

Start seeds indoors in April, setting plants out in May. Or, sow seeds where the vines are desired, in May after danger of frost is past.

COLOR: flowers inconspicuous.
HEIGHT: fifteen to twenty-five feet.
LOCATION: any good garden soil; sun.

* LARKSPUR (Annual)

Delphinium Ajacis

The annual sister of one of the best-known perennials, and a plant that has a long season of bloom. Select one or two named single colors and mass them.

The seed is slow in germinating and may well be sown in the fall. If this is not possible, sow outdoors early in April.

COLOR: blue and violet to white.
HEIGHT: eighteen inches to three feet.
PERIOD OF BLOOM: July to frost.
LOCATION: deep rich sandy loam; full sun.

LOVE-IN-A-MIST

Nigela Damascena

Known also under the names of "devil-in-a-bush" and "fennel flower." The plant is easily grown.

Sow seeds in the open any time after the middle of March. Thin the seedlings to eight inches apart, but do not transplant. Plant for successive bloom, making a sowing every two weeks until July first.

COLOR: white, blue, yellow.
HEIGHT: one to two feet.
PERIOD OF BLOOM: late June to frost.
LOCATION: any good garden soil; sun.

*MARIGOLD (AFRICAN)

Tagetes erecta

The common marigold of old gardens, with its characteristic strong-scented foliage. Some of the dwarf varieties in burnt-custard colorings are most effective in the front of the border.

Give plenty of room (eight inches to a plant), air and rich soil.

Sow seeds outdoors in May after danger of frost is past.

COLOR: yellow to deep orange.

HEIGHT: two feet.

PERIOD OF BLOOM: late July through early frosts.

LOCATION: light rich soil; full sun.

* MIGNONETTE

Reseda odorata

One of the best-known and most fragrant of the old-time annual herbs. Unfortunately, in attempting to improve the size of the flower spikes the odor has become stronger but less delicate and pleasing. The old garden forms, however, are still obtainable.

Sow seeds outdoors in April and again July first for a succession of bloom.

COLOR: yellowish white.
HEIGHT: six inches.
PERIOD OF BLOOM: July first to frost.
LOCATION: light, sandy soil.

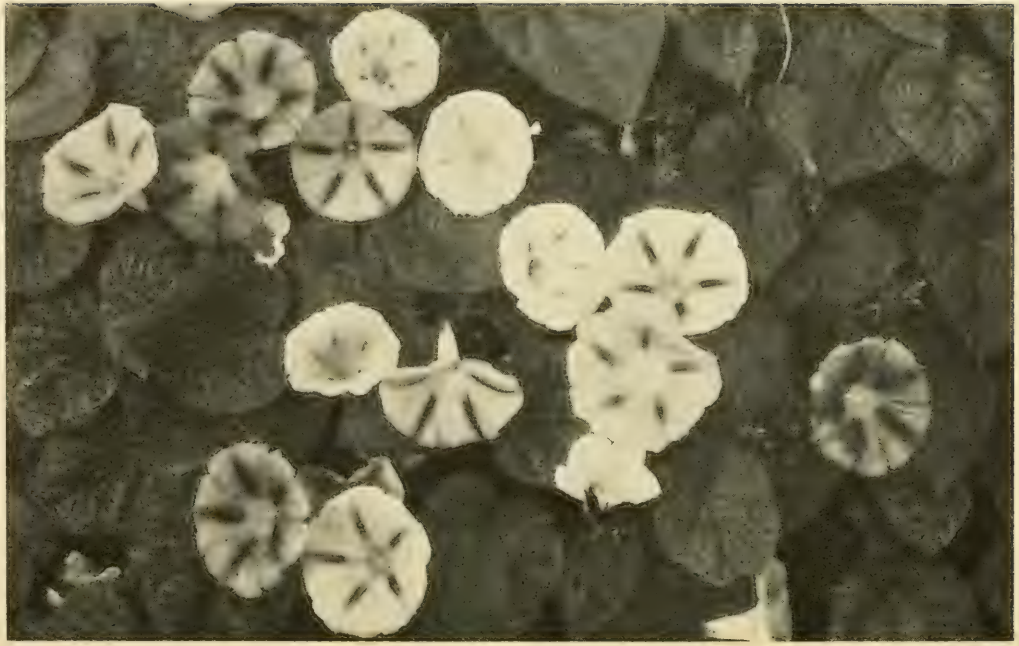
MOONFLOWER

Ipomœa Bona-nox

Especially valuable for covering arbors and for screening, and notable for their easy culture, quick growth and beautiful bloom. Give the vine plenty of water. The flowers are fragrant, and they are open and at their best at night, sometimes remaining open until noon. Excellent for evening cut flowers.

Seeds may be sown outdoors but are better started indoors April first. Hasten germination of seeds by filing a notch in the hard shell or soaking for a couple of hours in warm water. Set out the vines in May.

COLOR: white.
HEIGHT: ten to twenty feet.
PERIOD OF BLOOM: August and September.
LOCATION: strong soil; sun.



* MORNING-GLORY

Ipomœa purpurea

One of the least exacting and most versatile of all garden plants. Like its sister the moonflower, the morning-glory is a quick-growing vine of the greatest service in covering arbors or for screening.

Nick the seeds with a file, and the vines should bloom in six weeks from sowing (outdoors in May, after danger of frost is past).

Give plenty of water.

COLOR: various.

HEIGHT: four to ten feet.

PERIOD OF BLOOM: July to September.

LOCATION: strong soil; sun.

* NASTURTIUM

Tropæolum majus and *minus*

Majus is the climbing nasturtium, useful for covering banks or walls, or in the window-box. *Minus* is the dwarf variety—the Tom Thumbs, etc.—that is so deservedly popular for edging the border, not only for its flowers but for the leaves, which are among the most beautiful of all plants. To some people the variegated-leaf forms will appeal.

Sow seeds outdoors in May. If the plants bloom sparingly, pinch off leaves to induce flower growth.

COLOR: shades of yellow and orange.
HEIGHT: *majus*, climbing; *minus*, six inches.
PERIOD OF BLOOM: late June through early frosts.
LOCATION: warm, sunny, fairly moist soil.

NICOTIANA

Nicotiana alata (or *affinis*)

The tobacco plant, valued in the flower garden for its rapid growth, large foliage and fragrant night-opening flowers. In Middle States and South it maintains itself from year to year.

The seed is too small to germinate readily in ordinary soil: sprout it by spreading on a thin cloth over a pan of water that is kept continually warm. Then plant indoors in flats, setting out the plants in May.

Fertilize with wood ashes.

COLOR: white.

HEIGHT: two to three and a half feet.

PERIOD OF BLOOM: July and August.

LOCATION: rich, loose, deep, well-drained soil; sun, protected from winds, or partial shade.

* PANSY

Viola tricolor

One of the oldest of the garden flowers and one of the most popular.

The plant loves a cool moist climate, which fact explains the dwindling of size and amount of bloom in our hot, dry summers. Keep foliage and ground sprinkled frequently for best results.

Start seeds in coldframe in August for next spring's bloom; or purchase plants from the florist.

COLOR: various.

HEIGHT: six inches.

PERIOD OF BLOOM: all summer.

LOCATION: rich, clayey soil; morning sun, partial shade; sheltered.

* PETUNIA

Petunia hybrida

A plant of the easiest culture and of most profuse bloom. Its only faults are its tendency towards weediness and the garish colors of the common strains. Choose selected named varieties. Of the double-flowered sorts, only a quarter of the bloom will be double flowers—usually borne on the plants that were the weaker seedlings.

Sow seeds indoors April first and set out the plants early in May. Or, sow outdoors in May.

COLOR: white to light purple; and striped.
HEIGHT: two feet.
PERIOD OF BLOOM: July to frost.
LOCATION: any garden soil; open sun.

* PHLOX (Annual)

Phlox Drummondii

A plant originating in Texas about 1835, which was at once heralded with enthusiasm in England, and which has become one of the most popular annuals here.

Sow seed where plants are desired, and thin seedlings to one foot apart. Give the plants food and moisture to prolong bloom through the summer.

COLOR: various shades of pink and red, also white.

HEIGHT: six to eighteen inches.

PERIOD OF BLOOM: late July through early frosts.

LOCATION: good, light garden soil; sun or partial shade.

* PINK (CHINESE)

Dianthus Chinensis, var. *Hedewigi*

Single and double flowers of many vivid colors and bizarre markings, but scentless.

Sow seeds where plants are desired, or, better, start them indoors April first and transplant, six to eight inches apart, outdoors in May.

The plant is a biennial and will bloom more profusely and earlier the second year if given a dry sheltered spot.

COLOR: pinks, reds, etc.
HEIGHT: ten to sixteen inches.
PERIOD OF BLOOM: late July through early frosts.
LOCATION: dry, sheltered; sun.

* POPPY (SHIRLEY)

Papaver Rhœas

The best strain, for America, of the famous corn poppy of Europe. An English amateur gardener, Rev. W. Wilks, in 1880, developed the Shirley from a solitary flower showing a narrow edge of white. The flowers are always single and show the most wonderful silky texture in every imaginable combination of white, pink and red, with yellow anthers.

Sow seed in fall if possible, also early in spring and monthly thereafter until July. The seedlings are transplanted only with some risk. Thin the seedlings to four or six inches apart.

COLOR: pinks and reds.

HEIGHT: two to three feet.

PERIOD OF BLOOM: fall-sown, June to August; spring-sown, July to September.

LOCATION: any good garden soil; sun.

PORTULACA

Portulaca grandiflora

Known also as rose moss, and related to the common weed of sandy soils—purslane. Of the easiest culture in a hot, dry location. Good for edging and in dry parts of rock gardens. The display of color is brilliant on sunny days only. In some places the plant self-sows—the reason for its persistence in old gardens.

Sow seeds in corn-planting time (May 15), where plants are desired, and thin to ten or twelve inches apart.

COLOR: white to yellow, rose, red, purplish and striped.

HEIGHT: six to ten inches.

PERIOD OF BLOOM: July to frost.

LOCATION: hot, dry soil; full sun.

SALPIGLOSSIS

Salpiglossis sinuata

"Painted tongue," remarkable for its large, long stemmed, funnel-shaped flowers of varied coloring.

Sow seeds indoors about the middle of March and see that plants do not become stunted before transplanting. Or, sow outdoors in May.

COLOR: purples and blues through reds and yellows to cream, usually marbled and penciled.

HEIGHT: eighteen inches.

PERIOD OF BLOOM: late June to frost.

LOCATION: deep, light, rich soil, not liable to sudden extremes of moisture or drought; sun.

*SCABIOSA (MOURNING BRIDE)

Scabiosa atropurpurea

One of the best of the annuals, though apparently little known. The variety having black-purple flowers is one of the darkest and richest flowering plants. All the varieties have fairly long stems and keep well in water.

Sow seeds indoors April first to transplant in May one foot apart; or sow outdoors in May after danger of frost is past.

COLOR: white, pink, crimson, lavender, purple, violet and bi-colored.

HEIGHT: eighteen to thirty inches.

PERIOD OF BLOOM: early July to frost.

LOCATION: any good garden soil; sun.

* SCARLET SAGE

Salvia splendens

One of the most brilliant red-flowered bedding plants in cultivation. Its showiness and ease of culture have caused it to be used without restraint. Although it does best in full sun, it is of greater value to the gardener in brightening half-shaded spots in the foreground of trees or shrubs.

Sow seed of an early-blooming and compact strain in a frame or indoors early, so as to get good plants to set out in May.

COLOR: scarlet.

HEIGHT: two feet.

PERIOD OF BLOOM: July 15 to frost.

LOCATION: deep rich soil; sun or partial shade.

SCHIZANTHUS

Schizanthus pinnatus

The "butterfly flower," an annual herb from Chile. There are several interesting sorts bearing flowers of various brilliant markings.

Sow seeds outdoors where plants are to bloom, and thin to give each seedling a space one foot in diameter. Transplanting is done at some risk.

Stake the plants, unless the location is well sheltered from winds.

COLOR: white, violet and lilac with yellow.
HEIGHT: two feet, branching.
PERIOD OF BLOOM: July to frost.
LOCATION: any good soil, sheltered; sun.

SNAPDRAGON

Antirrhinum majus

In reality a perennial, but seeds sown very early in the spring give flowers the first year. Then, too, the first crop of bloom is usually the only one worth while. There are dwarf varieties for use as edgings, also double forms.

For early bloom sow the seeds in frames in August or September, mulching the young plants for winter protection. Or, sow the seeds as early as possible in the spring, in a frame if possible.

With winter protection the plant may be carried over, but the second year's bloom may be of another color.

COLOR: ranging from red and purple to white.

HEIGHT: one to three feet.

PERIOD OF BLOOM: August to frost.

LOCATION: light, rich soil; full sun.

SNOW-ON-THE-MOUNT

Euphorbia marginata

A particularly useful foliage plant for the gardener who realizes that the success of a garden does not depend entirely on the flowers. The leaves are margined with white, some of them being white all over. As a background for some strong red-flowering plant, euphorbia would be very effective. In the illustration it is shown as a foil for marigolds in a flower arrangement.

Start seeds indoors, preferably, to secure a longer season, setting out plants in early May.

COLOR: (of foliage) light green margined with white.
HEIGHT: two feet; erect and not spreading.
PERIOD OF BLOOM: flowers inconspicuous.
LOCATION: any good soil; sun.

* STOCK (TEN WEEKS)

Matthiola incana, var. *annua*

The name comes from the fact that the plant blooms in ten weeks from seed. Another name for it is "gillyflower," a corruption of July-flower. Most of the sorts are double clusters of small fragrant flowers at the top of an erect stiff stem.

Sow seed through March or early in April in a moderately warm hotbed, transplanting at the end of May, on a cloudy day, into the border. By successive sowings, one can have stocks in bloom throughout the summer.

COLOR: white, through rose, crimson, purple and parti-colored.

HEIGHT: one to two feet.

PERIOD OF BLOOM: July to frost (with successive sowing).

LOCATION: rich, sandy loam; sun.

SUMMER CYPRESS

Kochia scoparia

A little-known plant that may be used to great advantage to take the place of small clipped evergreens in the annual garden. The growth is erect, stiff and pyramidal—excellent qualifications for the corners of formal beds or to flank the ends of a walk. The foliage is light green until September, when it turns a rich crimson. The plant dies two weeks after producing its countless number of minute flowers. In the illustration it is shown used as a border.

Sow seeds indoors in April or in the open May first.

COLOR: (foliage) light green turning to crimson.
HEIGHT: two to two and a half feet.
PERIOD OF BLOOM: flowers inconspicuous.
LOCATION: clayey soil; sun.

SUNFLOWER

Helianthus annuus

Too coarse for a location near the house, but excellent at the back of a distant border in masses. Give plenty of room—a diameter of three feet to a plant—as the sunflower is a gross feeder. The plant is ideal for the chicken yard, furnishing a little shade and food that is relished.

Sow seeds where they are to grow in April or May, or, better still, start them indoors in March, setting out the plants in May after danger of frost is past.

COLOR: yellow.

HEIGHT: three to twelve feet.

PERIOD OF BLOOM: August to frost.

LOCATION: any, but best is light, rich soil with moisture; full sun.

* SWEET ALYSSUM

Alyssum maritimum

Undoubtedly the most popular of all the edging plants, largely because of the long season of bloom and ease of culture. Its light green foliage and sweet-scented abundant bloom are practically indispensable in the annual garden. Avoid the straight line of plants in the edging—sowing a drift here and there that extends back between higher plants.

Sow seeds early—April first—where the plants are desired. Pinch off the bloom and foliage stems from time to time to induce continued flowering.

COLOR: white.

HEIGHT: four to six inches.

PERIOD OF BLOOM: June through early frosts.

LOCATION: any good garden soil, best in sandy loam; sun.

* SWEET PEA

Lathyrus odoratus

The sweet pea should have, and is well worthy of, a generous portion of the garden to itself.

Cultivate the soil deeply, above all things, and insure abundant moisture. Train the vines on brush, preferably, to prevent their burning, but wire mesh will serve and is more sightly and durable.

Sow seeds in March (except white-seeded varieties, which should go in in April) an inch apart in a trench eight inches deep, on fine soil, covering with an inch of soil and gradually filling in trench as seedlings appear and increase in height. A very common mistake is sowing too thick. Expert growers thin seedlings to six inches apart.

Constant cutting insures the maximum of bloom. Give plenty of water.

COLOR: various.

HEIGHT: five to six feet.

PERIOD OF BLOOM: July to September.

LOCATION: moderately rich and deeply worked soil; open sun.

* SWEET SULTAN

Centaurea moschata

A straight-growing annual that is valuable chiefly for the large, fragrant flower-heads. Being a centaurea, it is closely allied to the cornflower (*Centaurea cyanus*), but the longer stems make it a better flower for cutting.

In the illustration the large sharp-petalled heads are the sweet sultans; the others are the cyanus variety—ragged sailor, cornflower or bachelor's button, as it is called—which are less improved horticulturally.

Start seed indoors early in April and set plants out in May. Or, sow seed outdoors in May. It is better, however, to get an early start so as to enable the plant to perfect its flowers before very hot weather.

COLOR: white, yellow or purple.
HEIGHT: two feet.
PERIOD OF BLOOM: June, through August.
LOCATION: any good garden soil; sun.

VERBENA

Verbena (various species)

Another of the time-honored plants from our grandmothers' gardens. One of its good properties lies in the fact that after blooming all summer it may be cut back, given a rest, then forced into bloom again as a house plant. The white-flowering varieties are said to be the more fragrant.

Start seeds indoors in March in a flat or in a flower-pot on the window-sill. Or, plants may usually be bought from the florist, to set out early in May.

COLOR: white through lilac and rose to purplish blue; also yellow.

HEIGHT: two feet.

PERIOD OF BLOOM: early July through first frosts.

LOCATION: rich soil, better moist; sun or partial shade.

* ZINNIA

Zinnia elegans

A rather stiff, formal plant, in bad repute with some gardeners because of its magenta varieties. Used intelligently, from named varieties in good colors, it ranks with the best annuals, and even approaches the dahlia in perfection of form.

Sow seeds about May first and thin plants out to a foot or two apart, depending upon whether the dwarf or tall sorts are used.

COLOR: white, yellow, orange, scarlet, rose, purple, etc.

HEIGHT: six inches to two and a half feet.

PERIOD OF BLOOM: July to frost.

LOCATION: deep, rich soil; sun.

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